RESOLUTION 71 (Rev. Busan, 2014)

Strategic plan for the Union for 2016-2019

The Plenipotentiary Conference of the International Telecommunication Union (Busan, 2014),

considering

*a)* the provisions of the ITU Constitution and ITU Convention relating to strategic policies and plans;

*b)* Article 19 of the Convention, on the participation of Sector Members in the Union's activities;

*c)* Resolution 72 (Rev. Busan, 2014) of this conference, which underlines the importance of linking strategic, financial and operational plans as a basis for measuring progress in achieving the objectives and goals of ITU,

noting

the challenges faced by the Union in achieving its purposes in the constantly changing telecommunication/information and communication technology (ICT) environment as well as the context for the development and implementation of the strategic plan, as outlined in Annex 1 to this resolution,

recognizing

*a)* the experience gained in implementing the strategic plan for the Union for 2012-2015;

*b)* the recommendations of the report by the United Nations Joint Inspection Unit (JIU) on Strategic Planning in the United Nations system, published in 2012;

*c)* that the effective linkage between the strategic plan and the financial plan, which is detailed in Annex 1 to Decision 5 (Rev. Busan, 2014) of this conference, can be achieved through reallocation of the resources of the financial plan to the various Sectors, and then to the goals and objectives of the strategic plan, as presented in Annex 3 to this resolution,

resolves

to adopt the strategic plan for 2016-2019, contained in Annex 2 to this resolution,

instructs the Secretary-General

1 in coordination with the Directors of the three Bureaux, to develop and implement an ITU results framework for the strategic plan of the Union for 2016-2019 (Annex 2), following the principles of results-based budgeting (RBB) and result-based management (RBM);

2 in coordination with the Directors of the three Bureaux, when reporting annually to the ITU Council, to present annual progress reports on the implementation of the strategic plan for 2016-2019 and on the performance of the Union towards the achievement of its goals and objectives, including recommendations to adjust the plan in the light of changes in the telecommunication/ICT environment and/or as a result of the performance evaluation, in particular by:

i) updating the sections of the strategic plan related to objectives, outcomes and outputs;

ii) making all modifications necessary to ensure that the strategic plan facilitates the accomplishment of ITU's mission, taking account of proposals by the competent Sector advisory groups, decisions by conferences and by assemblies of the Sectors and changes in the strategic focus of the Union's activities, within the context of the financial limits established by the Plenipotentiary Conference;

iii) ensuring the linkage between the strategic, financial and operational plans in ITU, and developing the corresponding human resources strategic plan;

3 to distribute these reports to all Member States, after consideration by the Council, urging them to circulate the reports to Sector Members, as well as to those entities and organizations referred to in No. 235 of the Convention which have participated in these activities,

instructs the Council

1 to oversee further development and implementation of the ITU results framework for the implementation of the strategic plan of the Union for 2016‑2019 (Annex 2);

2 to oversee further development and implementation of the strategic plan for 2016-2019 in Annex 2 to this resolution, and when necessary adjust the strategic plan, on the basis of the Secretary-General's reports;

3 to present an assessment of the results of the strategic plan for 2016‑2019 to the next plenipotentiary conference, along with a proposed strategic plan for the period 2020-2023,

invites the Member States

to contribute national and regional insights on policy, regulatory and operational matters to the strategic planning process undertaken by the Union in the period before the next plenipotentiary conference, in order to:

− strengthen the effectiveness of the Union in fulfilling its purposes as set out in the instruments of the Union, by cooperating in the implementation of the strategic plan;

− assist the Union in meeting the changing expectations of all its constituents as national structures for the provision of telecommunication/ICT services continue to evolve,

invites Sector Members

to communicate their views on the strategic plan of the Union through their relevant Sectors and the corresponding advisory groups.

Annex 1 to Resolution 71 (Rev. Busan, 2014)

Background on the strategic plan for the Union for 2016-2019

This background information document includes an introduction to the International Telecommunication Union (ITU), its role as a United Nations (UN) specialized agency and the role and mission of the ITU Sectors and governing bodies, as presented in Section 1.

The general assessment presented in Section 2 provides lessons learnt from the implementation of the strategic plan for 2012-2015, and sets out main broad trends shaping the telecommunication/information and communication technology (ICT) environment/sector relevant for the strategic plan for 2016‑2019.

Section 3 introduces Sector-specific situational analyses presenting the role and future of each of the ITU Sectors.

# 1 Introduction

In accordance with the purposes of ITU, as defined in the ITU Constitution (Article 1, §1-2) and ITU Convention, ITU is committed to connecting the world. In order to achieve this, ITU works to ensure that the global communications infrastructure runs smoothly and efficiently so as to enable everybody to access the benefits of telecommunications/ICTs and assist in mitigating new risks. ITU oversees international spectrum allocation and satellite coordination; works to develop and gain consensus on new telecommunication/ICT standards; and carries out policy analysis and work on the development of an enabling environment as well as providing technical assistance to its Member States.

ITU's work, as determined and guided by its Member States and Sector Members, covers a broad range of issues: from the underlying standards for broadband to spectrum allocation; from basic access technologies to high‑speed mobile broadband; from submarine cables to terrestrial optical fibre; from microwave links to satellites; from accessibility to e-health; and from gender empowerment to interoperability. The work accomplished in ITU in collaboration with governments, the private sector, academia and civil society helps ensure ubiquitous and efficient radio, telephone, television and Internet connectivity.

## 1.1 ITU as a part of the United Nations system: Contributing to a transformative post-2015 development agenda

As the deadline for the Millennium Development Goals (MDGs) approaches, and with the UN Post-2015 Development Agenda and Sustainable Development Goals (SDGs) processes well under way, UN Member States are engaged in the formulation of a single development framework embodying one coherent set of goals, which integrates in a balanced manner the three dimensions of sustainable development identified by the Rio+20 process (social development; economic development; and environmental protection).

Telecommunications/ICTs, including broadband, are essential in accelerating progress towards sustainable development. Such technologies are a key foundation for any development policy and a major enabling tool of any development plan at the national, regional and/or global levels.[[1]](#footnote-1)1

Since 2003, the World Summit on Information Society (WSIS) process has been an important instrument for driving global telecommunication/ICT development in support of the global development agenda. As part of its strategy to connect the world, ITU is striving to ensure that telecommunications/ICTs continue to receive the recognition they deserve in the international community and in UN's new approach to ensuring sustainable and equitable development.

As part of the UN efforts, ITU is also committed to mainstreaming UN priorities in its strategic planning and work, in such areas as gender equality, youth, persons with disabilities, rural populations, older persons and disaster risk reduction, among others. The UN system has also been engaged in a reform process which, *inter alia*, requires business practices to be harmonized, in particular applying the results-based management (RBM) methodology. ITU's strategy takes into account these global priority efforts and reforms.

## 1.2 Governing bodies / Role of the Sectors

The Union comprises: a) the Plenipotentiary Conference, which is the supreme organ of the Union; b) the ITU Council, which acts on behalf of the Plenipotentiary Conference; c) World conferences on international telecommunications; d) the Radiocommunication Sector (ITU-R), including world and regional radiocommunication conferences, radiocommunication assemblies and the Radio Regulations Board; e) the Telecommunication Standardization Sector (ITU-T), including world telecommunication standardization assemblies; f) the Telecommunication Development Sector (ITU-D), including world and regional telecommunication development conferences; and g) the General Secretariat. The three Bureaux (the Radiocommunication Bureau – BR; the Telecommunication Standardization Bureau – TSB; and the Telecommunication Development Bureau – BDT) serve as the secretariat to each respective Sector.

### 1.2.1 ITU governing bodies

#### 1.2.1.1 Plenipotentiary Conference

The Union is governed by the Plenipotentiary Conference. The Plenipotentiary Conference is the supreme organ of ITU. It is the decision-making body which determines the direction of the Union and its activities.

#### 1.2.1.2 ITU Council

The ITU Council acts as the Union's governing body in the interval between plenipotentiary conferences. The Council takes all steps to facilitate the implementation of the provisions of the Constitution, the Convention, the Administrative Regulations (International Telecommunication Regulations and Radio Regulations), the decisions of plenipotentiary conferences and, where appropriate, the decisions of other conferences and meetings of the Union. The Council also acts on ITU’s policy and strategic planning and is responsible for ensuring the smooth day-to-day running of the Union, coordinating work programmes, approving budgets and controlling finances and expenditure. Its role is to consider broad telecommunication policy issues in order to ensure that the Union's activities, policies and strategies fully respond to today's dynamic, rapidly changing telecommunication/ICT environment/sector.

### 1.2.2 Role and missions of the ITU Sectors

#### 1.2.2.1 ITU Radiocommunication Sector

The ITU Radiocommunication Sector (ITU-R) plays a vital role in global management of the radio-frequency spectrum and satellite orbits – limited natural resources which are increasingly in demand from a large and growing number of services such as fixed, mobile, broadcasting, amateur, space research, emergency telecommunications, meteorology, global positioning systems, environmental monitoring and communication services that ensure safety of life on land, at sea and in the skies.

The mission of ITU-R is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including those using satellite orbits, and to carry out studies and approve recommendations on radiocommunication matters.

World Radiocommunication Conference

The World Radiocommunication Conference (WRC) is held every three to four years. It is the mandate of WRC to review and, if necessary, revise the Radio Regulations, the international treaty governing the use of the radio-frequency spectrum and geostationary-satellite and non-geostationary-satellite orbits. Revisions are made on the basis of an agenda determined by the ITU Council, which takes into account recommendations made by previous WRCs.

Radiocommunication Assembly

The Radiocommunication Assembly (RA) is responsible for the structure, programme and approval of radiocommunication studies. It:

– assigns conference preparatory work and other questions to the study groups;

– responds to other requests from ITU conferences;

– suggests suitable topics for the agenda of future WRCs;

– approves and issues ITU-R recommendations and ITU-R questions developed by the study groups;

– sets the programme for study groups, and disbands or establishes study groups according to need.

Radio Regulations Board

The twelve members of the Radio Regulations Board (RRB) are elected at the Plenipotentiary Conference. They perform their duties independently and on a part-time basis.

The Board:

– approves Rules of Procedure, which are used by the Radiocommunication Bureau in applying the provisions of the Radio Regulations and registering frequency assignments made by the Member States;

– addresses matters referred by the Bureau which cannot be resolved through application of the Radio Regulations and Rules of Procedure;

– considers reports of unresolved interference investigations carried out by the Bureau at the request of one or more administrations, and formulates recommendations;

– provides advice to radiocommunication conferences and radiocommunication assemblies;

– considers appeals against decisions made by the Radiocommunication Bureau regarding frequency assignments;

– performs any additional duties prescribed by a competent conference or by the Council.

ITU-R study groups

The ITU-R study groups, including the Special Committee on regulatory/procedural matters, develop the technical, operational, regulatory and procedural bases for decisions taken by WRCs. These bases are consolidated by the Conference Preparatory Meeting (CPM). The ITU-R study groups also develop international standards (recommendations), reports, opinions and handbooks on radiocommunication matters.

Radiocommunication Advisory Group

In accordance with Article 11A of the Convention, the Radiocommunication Advisory Group (RAG) shall: “1) review priorities, programmes, operations, financial matters and strategies related to radiocommunication assemblies, study groups and other groups and the preparation of radiocommunication conferences, and any specific matters as directed by a conference of the Union, a radiocommunication assembly or the Council; 1bis) review the implementation of the operational plan of the preceding period in order to identify areas in which the Bureau has not achieved or was not able to achieve the objectives laid down in that plan, and advise the Director on the necessary corrective measures; 2) review progress in the implementation of the programme of work […]; 3) provide guidelines for the work of study groups; 4) recommend measures, *inter alia*, to foster cooperation and coordination with other standards bodies, with the Telecommunication Standardization Sector, the Telecommunication Development Sector and the General Secretariat; […] 6) prepare a report for the Director of the Radiocommunication Bureau indicating action in respect of the above items; 7) prepare a report for the Radiocommunication Assembly on the matters assigned to it in accordance with No.137A of this Convention and transmit it to the Director for submission to the assembly […]".

#### 1.2.2.2 ITU Telecommunication Standardization Sector

The mission of the ITU Telecommunication Standardization Sector (ITU-T) is to provide a unique forum for industry and government to work together to foster the development and use of interoperable, non-discriminatory and demand-driven international standards. These standards are based on openness and take into account needs of users, in order to create an environment where users can access affordable services worldwide regardless of underlying technology, particularly in developing countries[[2]](#footnote-2)\*, while establishing links between the activities of ITU-T and the relevant WSIS outcomes.

World Telecommunication Standardization Assembly

The World Telecommunication Standardization Assembly (WTSA) sets the overall direction and structure for ITU-T. It meets every four years and defines the general policy for the Sector, establishes study groups, approves their expected work programme for the next four-year period, and appoints their chairmen and vice-chairmen.

Telecommunication Standardization Advisory Group

In accordance with Article 14A of the Convention, the Telecommunication Standardization Advisory Group (TSAG) shall "1) review ITU-T priorities, programmes, operations, financial matters and strategies for activities in the Telecommunication Standardization Sector; 1bis) review the implementation of the operational plan […]; 2) review progress in the implementation of the programme of work […]; 3) provide guidelines for the work of study groups; 4) recommend measures, *inter alia*, to foster cooperation and coordination with other relevant bodies, with the Radiocommunication Sector, the Telecommunication Development Sector and the General Secretariat; […] 6) prepare a report for the Director of the Telecommunication Standardization Bureau indicating action in respect of the above items; 7) prepare a report for the world telecommunication standardization assembly on the matters assigned to it […]".

ITU-T study groups

The ITU-T study groups assemble experts from around the world to develop international standards known as ITU-T recommendations, which act as defining elements in the global telecommunication/ICT infrastructure. They enable global communications by ensuring that countries' telecommunication/ICT networks and devices are interoperable.

#### 1.2.2.3 ITU Telecommunication Development Sector

The core mission of the ITU Telecommunication Development Sector (ITU-D) is to foster international cooperation and solidarity in the delivery of technical assistance and in the creation, development and improvement of telecommunication/ICT equipment and networks in developing countries. ITU‑D is required to discharge the Union's dual responsibility as a UN specialized agency and also as an executing agency for implementing projects under the UN development system or other funding arrangements, so as to facilitate and enhance telecommunication/ICT development by offering, organizing and coordinating technical cooperation and assistance activities.

World Telecommunication Development Conference

The World Telecommunication Development Conference (WTDC) sets the agenda and guidelines for ITU-D for the following four-year cycle, while regional conferences review "work-in-progress" towards the overall objectives and ensure that goals are met. WTDCs serve as forums for the discussion of the digital divide, telecommunications and development by all stakeholders involved in and concerned with ITU-D's work. In addition, they review the numerous programmes and projects of the Sector and the Telecommunication Development Bureau (BDT). Results are reported and new projects are launched.

Regional preparatory meetings (RPM) for WTDC bring together the countries in each region to explore and discuss their needs and the present and future projects of the Sector.

Telecommunication Development Advisory Group

In accordance with Article 17A of the Convention, the Telecommunication Development Advisory Group (TDAG) shall: "1) review priorities, programmes, operations, financial matters and strategies for activities in the Telecommunication Development Sector; 1*bis*) review the implementation of the operational plan of the preceding period in order to identify areas in which the Bureau has not achieved or was not able to achieve the objectives laid down in that plan, and advise the Director on the necessary corrective measures; 2) review progress in the implementation of the programme of work […]; 3) provide guidelines for the work of study groups; 4) recommend measures, *inter alia*, to foster cooperation and coordination with the Radiocommunication Sector, the Telecommunication Standardization Sector and the General Secretariat, as well as with other relevant development and financial institutions; […] 6) prepare a report for the Director of the Telecommunication Development Bureau indicating action in respect of the above items; 6bis) prepare a report for the world telecommunication development conference on the matters assigned to it in accordance with No. 213A of this Convention and transmit it to the Director for submission to the conference […]".

ITU-D study groups

In support of BDT’s knowledge-sharing and capacity-building agenda, the ITU-D study groups study and analyse specific task-oriented telecommunication/ICT questions of priority to developing countries. ITU-D has two study groups, providing a neutral forum for governments, industry and academia to address priority issues for the telecommunication/ICT sector: ITU-D Study Group 1 addresses issues related to an enabling environment for the development of telecommunications/ICTs; ITU-D Study Group 2 addresses issues related to ICT applications, cybersecurity, emergency telecommunications and climate-change adaptation.

#### 1.2.2.4 Intersectoral activities

Resolutions and decisions of the Plenipotentiary Conference and the Council foresee other, intersectoral events, forums and conferences, in accordance with the mandate of the Union.

World Conference on International Telecommunications

The World Conference on International Telecommunications (WCIT) may partially, or in exceptional cases, completely revise the International Telecommunication Regulations and may deal with any question of a worldwide character within its competence and related to its agenda.

# 2 General assessment

This general assessment briefly reviews the implementation of the strategic plan for the Union for 2012-2015 and identifies main trends and challenges of the telecommunication/ICT environment/sector that will influence and shape ITU's work in future. It specifically recognizes the following:

• Telecommunications/ICTs are growing strongly, and becoming more widely available and pervasive.

• As telecommunications/ICTs become more widespread, the challenges of inequalities and exclusion are becoming greater: special attention must thus be given to bridging the digital divide and ensuring inclusion.

• New risks and challenges emerge with increasing growth and use of telecommunications/ICTs.

• Convergence is occurring on different levels, breaking down silos between different technological sectors. Technologies are evolving rapidly, with accelerating rates of innovation, while becoming more pervasive. The telecommunication/ICT environment/sector is becoming increasingly complex. The evolution and convergence of telecommunications/ICTs will also impact the changing telecommunication/ICT environment/sector.

## 2.1 Brief review of the implementation of strategic plan for the Union for 2012-2015

The ITU strategic plan for 2012-2015 was adopted in 2010 by the Plenipotentiary Conference in Guadalajara (Mexico). It is structured with a view, *inter alia*, to facilitating implementation of the RBM methodology and linking the strategic goals to ITU's core activities.

The strategic plan for 2012-2015 has allowed ITU to progress towards fulfilling its mission and achieving its goals. A comprehensive overview of its results from 2011[[3]](#footnote-3)2 to 2014 can be found in the "Report on the Implementation of the strategic plan and on the activities of the Union 2011-2014" (Document PP‑14/20).

Lessons learned

On the basis of an analysis of the implementation of the current strategic plan and a thorough review of the practices of other UN organizations, key adjustments needed to the strategic plan for 2016-2019 have been identified, as follows:

**• One vision, mission and set of core values**: The common vision and mission of the Union, and the core values that drive priorities and guide decision-making processes, shall be defined and stated up front in the strategic plan.

**• Strong results-based framework**: Strategic planning and operational planning shall follow the same results-based framework, but in a different level of detail. To drill down the principles of RBM, the components of the ITU results-based framework shall include:

– **ITU strategic goals** and **targets**: There is a need to define Union-wide strategic goals, to which the three Sectors, the corresponding Bureaux and the General Secretariat all contribute. Global telecommunication/ICT targets may serve as the indicators of achievement at the level of strategic goals, providing baselines and targets for the period of the strategic plan.

– **Objectives and outcomes**: The Sectoral and intersectoral objectives and outcomes shall be set in order to achieve the strategic goals of the Union.

– **Outputs** and corresponding **activities**: Final products or services delivered by ITU and the corresponding activities that need to be undertaken to produce them shall be defined within the operational planning process. This will ensure proper alignment with the ITU strategic goals and objectives/outcomes, and will allow for any corrective actions during the four-year period of the strategic plan, permitting proper adjustments required by the rapidly changing telecommunication/ICT environment/sector.

**• Clear** **Implementation criteria**: Appropriate criteria shall be defined to strengthen the linkage between strategic and operational planning, and provide the criteria for prioritizing among different activities of the Union

**•** Strengthening the **RBM methodology**: In order to further improve monitoring of the implementation of the strategic plan and allow for any corrective actions during the four-year period, a comprehensive ITU results framework shall be developed, and shall be supported by the enhancement of the following frameworks:

– **Performance-management framework**: The performance-management framework shall serve to evaluate not only performance with respect to ITU's activities, but also progress towards achievement of the strategic goals by meeting the global telecommunication/ICT targets.

– **Risk-management framework**: The risk-management framework shall serve to identify, analyse, evaluate and address risks that might have an impact on the performance of the Union in pursuit of its goals and objectives. Risk-mitigation measures defined within the framework shall be considered, planned and implemented via the operational planning process.

## 2.2 The telecommunication/ICT environment/sector

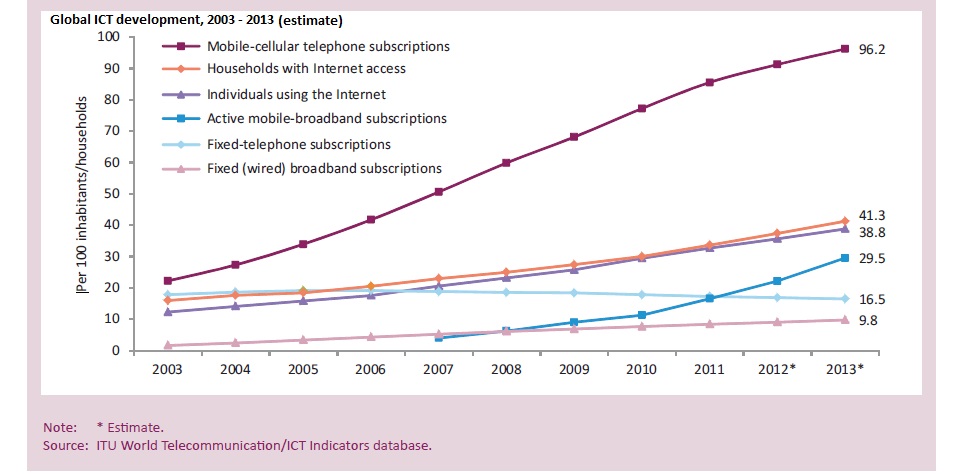
Telecommunications/ICTs are transforming virtually every facet of modern life – in work, business, social and cultural life, as well as entertainment. According to ITU estimates, there were 6.8 billion mobile-cellular subscriptions by end 2013 or almost as many as there were people on the planet, giving a mobile-cellular penetration rate of 96 per cent. There were close to 5 billion people with access to television, and 2.4 billion Internet users by end 2013. New telecommunications/ICTs continue to penetrate countries in all regions of the world, as more and more people get connected.

### 2.2.1 Growth in and evolution of telecommunications/ICTs

Telecommunications/ICTs are evolving rapidly, and have become more widespread and pervasive. Figure 1 shows global telecommunication/ICT development, i.e. increase in levels of access for different types of telecommunications/ICTs over the past decade. Telecommunications/ICTs have become critical infrastructure, supporting not only communications for citizens and organizations, but also other integral services, such as power supply, healthcare and financial services.

The uptake of both fixed (wired)-broadband and, in particular, mobile-broadband services has continued to grow worldwide. Currently, there are three times as many mobile-broadband as fixed-broadband subscriptions (2.1 billion, as against 700 million). Indeed, mobile broadband is the telecommunication/ICT service displaying the sharpest growth rates globally (Figure 1 below), and is contributing to changes in telecommunication/ICT use and uptake and in the type of services that the industry is providing.

**Figure 1 – Global telecommunication/ICT development 2003-2013**



These rapid growth rates will continue and accelerate in the future. For example, Ericsson predicts that the number of smartphone subscriptions is expected to exceed 4 billion by 2018, while mobile-broadband subscriptions are projected to reach 7 billion subscriptions in 2018.[[4]](#footnote-4)3 Other analysts project that, globally, 4G subscriptions will grow tenfold over five years, from 88 million in 2012 to 864 million in 2017.[[5]](#footnote-5)4

As a result of the growth in users, traffic and applications, overall revenues in the telecommunication/ICT sector are expected to continue to rise, but new industry participants seem poised to take an increasing share. Total revenues from traditional telecommunication operators are likely to grow, even though they may lose up to 6.9 per cent in cumulative voice revenues (representing USD 479 billion) to over-the-top (OTT) VoIP services by 2020.[[6]](#footnote-6)5 In another closely related area, the cloud computing market was worth USD 18 billion in 2011, and was estimated to reach USD 32 billion by 2013,[[7]](#footnote-7)6 driven by big data stored in the cloud now accounting for two-thirds of data centre traffic worldwide.[[8]](#footnote-8)7

Annual global IP traffic is expected to surpass the zettabyte threshold (1.4 zettabytes) by end 2017, driven by the diversification of pay-TV and video streaming services, and other media-rich content.[[9]](#footnote-9)8 More than 4 billion hours of video are watched on YouTube each month, 30 billion pieces of content are shared on Facebook every month, and some 400 million tweets are sent per day by about 200 million monthly active users.[[10]](#footnote-10)9

The Internet of Things (IoT) is rapidly becoming a reality, and machine-to-machine (M2M) communications are expected to grow significantly in the near future. By 2017, televisions, tablets, smartphones and business Internet M2M modules will register growth rates of 42 per cent, 116 per cent, 119 per cent and 86 per cent, respectively. Traffic from wireless devices will already exceed traffic from wired devices by 2014.[[11]](#footnote-11)10

The term "big data" is used to define high-volume, high-velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making.[[12]](#footnote-12)11 It is estimated that 40 zettabytes of data will be created by 2020, an increase of 300 times from 2005. Current estimates indicate that 2.5 quintillion bytes of data are created each day. Most companies in the United States have at least 100 terabytes of data stored. Depending on the industry and the organization, big data encompasses information from multiple internal and external sources such as transactions, social media, enterprise content, sensors and mobile devices. As of 2011, the global size of data in healthcare was estimated to be 150 exabytes, and in 2014 it is estimated that there are 420 million wearable wireless health monitors.[[13]](#footnote-13)12

Telecommunications/ICTs increasingly contribute to social and economic development by enabling access to and the exchange of information and services anywhere and anytime, as well as rapid processing and vast storage of such information, making provision of public and private services more effective, efficient, accessible and affordable. They are also expanding access to markets, improving disaster management and facilitating democratic participation in governance processes. Telecommunication/ICTs provide more cost-efficient and effective ways to preserve and promote local culture. They are bringing down the costs of economic and social activities (for example by replacing transport and postal services), and opening up entirely new business opportunities (such as cloud-based services, mobile applications and services, business process outsourcing and content-related businesses).

In the modern world, telecommunications/ICTs, and broadband networks and services in particular, are vital to countries' economic growth (Box 1) and national competitiveness in the global digital economy. Telecommunication/ICT and broadband networks support rapid and efficient communications across different countries and continents. Not only that, but telecommunication/ICT products and services are part of the higher-value high-tech sector in their own right – the sector which is growing fastest in terms of international trade[[14]](#footnote-14)13, and which can sustain even faster growth in incomes. As well as being an economic sector in their own right, today telecommunications/ICTs are enablers leveraging technological competitiveness across other sectors. Broadband is essential for generating new skills and fuelling economic growth and technological change throughout the economy – from agriculture to finance, education, healthcare and modern services.

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| **Box 1: The contribution of telecommunications/ICTs to national development**  Widely cited research from the World Bank[[15]](#footnote-15)14 shows that ICTs, and in particular fast access to the Internet, accelerate economic growth, especially in less developed countries. Examples of the impact of utilization of telecommunication/ICTs include the following:  • It is estimated that by 2025, ICTs could have a global economic impact of the order of trillions of USD.[[16]](#footnote-16)15 The annual economic benefit of the mobile Internet will be between USD 3.7 trillion and USD 10.8 trillion globally by 2025. Bringing broadband penetration levels in emerging markets up to today's Western European levels could potentially add USD 300-420 billion in GDP and generate 10-14 million jobs.[[17]](#footnote-17)16  • A report by the Broadband Commission[[18]](#footnote-18)17 forecasts that health applications available via mobile broadband will reduce costs, e.g. by allowing physicians to provide care remotely via remote monitoring and diagnosis, or by supporting preventive care. It is estimated that mobile health could save developed countries USD 400 billion in 2017 and save a million lives over five years in sub-Saharan Africa.[[19]](#footnote-19)18  • It is estimated that 2.5 billion individuals are unbanked worldwide. ICT financial services represent an opportunity for many nations to achieve financial inclusion of the poor.  • Small and medium-sized enterprises (SMEs) which spend more than 30 per cent of their budget on web technologies grow their revenue nine times as fast as SMEs spending less than 10 per cent.[[20]](#footnote-20)19  • ICT solutions represent one of the most innovative and high-potential means of tackling environmental challenges. The ICT sector has been estimated to contribute 2‑2.5 per cent of greenhouse gas (GHG) emissions. However, at the same time the smart use of ICTs can reduce GHG emissions by up to 25 per cent.[[21]](#footnote-21)20  Source: Various. |

### 2.2.2 Inequality and digital exclusion

#### 2.2.2.1 The digital divide

Despite this rapid growth in access to and use of telecommunications/ICTs, around 4.4 billion people – nearly two-thirds of the world population – still do not have regular access to the Internet. Furthermore, 92 per cent of the population of the 49 UN-designated least developed countries (LDCs) (which are home to some 890 million people) are still unable to access the world's biggest and most valuable library and marketplace on a regular basis. With 53 per cent of the population in developing countries living in rural areas, the infrastructure challenge to connect all of these people to high-speed Internet is enormous.

Even more importantly, telecommunication/ICT networks and ICT skills are the foundations on which tomorrow's digital economy will be built. Two-thirds of the global population are therefore currently unable to access or develop the digital skills which will determine future national competitiveness. Box 2 shows the magnitude of the gap between the developed and developing world.

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| **Box 2: Tracking the digital divide with the ICT Development Index**  **Box Figure 1 – The digital divide: Active mobile-broadband (left graph) and fixed (wired)-broadband subscriptions (right graph)**    **Box Figure 2 – IDI, world and by level of development**    The ITU ICT Development Index (IDI) is a useful tool for comparing differences in telecommunication/ICT development since, as a composite index, it consolidates several telecommunication/ICT indicators into one single value. An analysis of the IDI points to a significant divide between the developed and developing world. In 2012, the average developed-country IDI value was exactly twice as high as the developing-country average. At the same time, the developing-country average IDI value is growing faster, at a rate of 5.8 per cent, as against 3.5 per cent for developed countries. While developed countries are starting to reach saturation levels, in particular in terms of mobile-cellular subscriptions and household telecommunication/ICT access, developing countries, where penetration levels remain much lower, have ample potential for growth.  Source: ITU Measuring the Information Society Report 2013 |

#### 2.2.2.2 The gender digital divide

Women in many countries suffer from a "gender gap" in regard to telecommunications/ICTs – lacking access to related skills, education, technology, networks and capital. A woman in the developing world is 21 per cent less likely to own a mobile phone than her male counterpart.[[22]](#footnote-22)21 In the developing world, 16 per cent fewer women than men use the Internet (as against only 2 per cent in the developed world), suggesting that, in many countries, women are coming online more slowly and later than men. This has serious implications for the ability of women to use the Internet to access information and develop the vital telecommunication/ICT skills needed to participate and work in today's digital economy.

Closing the gender gap would bring the benefits of wireless to an additional 300 million women,[[23]](#footnote-23)22 enabling them to fully participate in the economy and unlock their potential. Some 1.3 billion Internet users are women (37 per cent of all women worldwide) and 1.5 billion are men (41 per cent of all men), i.e. the current global Internet gender gap is about 200 million fewer women online.[[24]](#footnote-24)23 Without action, the global Internet gender gap would be about 350 million in three years' time. Bringing women online is beneficial to society overall – e.g. bringing 600 million additional women and girls online could raise GDP by up to USD 13-18 billion.[[25]](#footnote-25)24

#### 2.2.2.3 Telecommunications/ICTs and persons with disabilities

There are around 1 billion persons with disabilities in the world (or some 15 per cent of the global population), 80 per cent of whom live in developing countries. This important group of people still faces significant barriers that limit their social and economic inclusion. While telecommunications/ICTs have become a fundamental technology to support the independent living of persons with disabilities, important challenges still need to be addressed, namely: (a) bringing down the high cost of assistive technologies (including the cost of the technology, as well as the cost of assessment, training and support services); (b) lack of access to telecommunications/ICTs for persons with disabilities, as well as the lack of policies that would foster widespread availability of such technologies; and (c) limited availability and use of telecommunications/ICTs in general.[[26]](#footnote-26)25

### 2.2.3 Risks and challenges accompanying the growth of telecommunications/ICTs

The growing role of telecommunications/ICTs holds great promise, but the development of the environment has spawned some "collateral" issues. Breakthroughs in communications bring tremendous benefits, but also create new risks.

#### 2.2.3.1 Building confidence and security in the use of telecommunications/ICTs

With the increasing volume of e-commerce and online financial transactions, the availability of government services, and the popularity of collaborative and social networks, building confidence and maintaining trust in the use of telecommunications/ICTs will continue to be a major challenge. As telecommunications/ICTs continue to be further integrated into the economy and our societies, their continuous availability, reliability and security will be increasingly vital to governments, businesses and individuals. Promoting cybersecurity and international cooperation and coordination in this domain remains a key priority.

The cost of global cybercriminal activity is estimated at up to USD 1 trillion,[[27]](#footnote-27)26 a figure that could triple by 2020 unless companies step up their defences.[[28]](#footnote-28)27 Threats continue to proliferate – for example, new malware is being discovered every day, hundreds of times more frequently than in the past decade. No fewer than 6.5 million new malwares have been discovered in 2013.[[29]](#footnote-29)28

Some 69 per cent of the executives interviewed by the World Economic Forum[[30]](#footnote-30)29 feared that cyberattackers would remain more sophisticated and efficient than their companies' defence mechanisms. With a large multinational company expecting up to 10 000 cyberattacks per day, nearly 40 per cent of firms surveyed thought their spending on defences was "significantly too little".

Currently, there is a shift from standard forms of cyberattacks and related crimes to more sophisticated ones, exploiting new technological paradigms (e.g. cloud, big and open data, web 2.0, social networks, etc.). Yet countries are still trying to curb the current threats, and therefore will have difficulties in trying to catch up with the rapid evolution of the telecommunication/ICT environment/sector.

Future projections are difficult to acquire on account of the dynamic and fluid nature of cyberspace. However, it is clear that the growth and evolution of the risks and challenges associated with the use of telecommunications/ICTs is directly proportional to the growth and evolution of the telecommunication/ICT environment/sector itself. Therefore, cybersecurity – or rather building confidence and security in the use of telecommunications/ICTs – will remain at the top of the national, regional and international agendas.

### 2.2.3.2 Protection of the most vulnerable

Young people all over the world are the most active users of telecommunications/ICTs. Today, 30 per cent of the youth population are "digital natives" (a term broadly used to characterize young people with solid telecommunication/ICT experience who are drivers of the information society). ITU's "Measuring the Information Society 2013" report[[31]](#footnote-31)30 shows that within the next five years, the digital native population in the developing world is expected to double. However, young people and children are also vulnerable to novel forms of risks presented by telecommunications/ICTs, especially when they are ill-prepared to meet these challenges and inadequately protected by legislation. Young people and especially children encounter a range of risks online, including child pornography, grooming, cyberbullying, exposure to harmful content and privacy violations.

A Consumer Reports magazine survey found that 1 million children were harassed, threatened or subjected to other forms of cyberbullying on Facebook in 2011.[[32]](#footnote-32)31 Other statistics and studies show that 72 per cent of teens have a social networking profile. Nearly half (47 per cent)[[33]](#footnote-33)32 have a public profile viewable by anyone, and only the 15 per cent[[34]](#footnote-34)33 have checked the security and privacy settings on their social media account.

Recent initiatives on child online protection focus not only on combating and reducing risks, but also on empowering young people to participate actively in civic and social life online in a responsible and ethical manner as digital citizens. A comprehensive protection and empowerment response requires a multistakeholder approach involving a diverse range of governmental and non-governmental actors.

While significant investments have been made in North America, Europe and parts of Asia to understand children's online behaviour and implement strategies to protect children online, there are still many gaps in our knowledge of the vulnerabilities and needs of young online users in other parts of the world, especially in countries where Internet penetration remains low.

### 2.2.3.3 Telecommunications/ICTs and climate change

Central to the climate-change issue is the continuing production of greenhouse gas (GHG) emissions as a by-product of industrial and commercial life. While the telecommunication/ICT industry is key in addressing climate change, it also accounts for 2 to 2.5 per cent of global GHG emissions or 1 gigatonne of carbon dioxide (CO2) annually. Experts estimate that personal computers and other end-user devices are responsible for around 40 per cent of the GHG emissions from ICTs, while telecommunication networks and data centres generate 24 per cent and 23 per cent, respectively. This is supported by the SMART 2020 report,[[35]](#footnote-35)34 which further suggests that the growth rate of GHG emissions from the telecommunication/ICT industry was 6.1 per cent from 2002 to 2011, although it is expected to slow to 3.8 per cent from 2011 to 2020. The International Energy Agency (IEA) indicates that consumption related to ICTs   
already accounts for more than 5 per cent of total final global electricity consumption, and total ICT consumption could double by 2022 and climb to three times the 2010 rate by 2030.[[36]](#footnote-36)35 In addition, the United Nations University indicates that, in 2013 alone, 67 million metric tons of electrical and electronic equipment have been put on the market and 53 million metric tons of e-waste has been disposed of worldwide.

### 2.2.4 Changing telecommunication/ICT environment/sector

Fuelled by the evolution to all-IP-based wired and wireless next-generation networks (NGNs), convergence is transforming the telecommunication/ICT sector and providing major opportunities, as well as challenges, to industry operators, regulators and policy-makers alike, on both the national and international scale. Convergence is reshaping relations between previously disparate telecommunication and media platforms, enabling separate vertical services to be provided over unified horizontal platforms. As a result, previously siloed (service-specific) technology platforms are now supporting multiple voice, data and video services and applications. Convergence is blurring boundaries between previously separate service markets and giving rise to a need to review traditional policy and regulatory regimes, including reinforcing public safety issues. The boundaries between fixed and mobile and wireline and wireless are blurring, as telecommunications moves towards hybrid networks, where devices will be able to transfer seamlessly and smoothly from one network to another, without any interruption in service.

New telecommunication/ICT developments such as the combination of mobile Internet and the Internet of Things (IoT) are heralded as some of the most disruptive technologies of the coming decade.[[37]](#footnote-37)36 In fact, the advent of new digital devices, networks, services and applications represent a profound change that is reshaping major industries.

Countries are updating and adapting their policies to accommodate and reflect the changes in technologies and markets. As a consequence, national telecommunication/ICT policies are increasingly focusing on broader, cross-sectoral considerations[[38]](#footnote-38)37 (Figure 2).

**Figure 2 – Evolution in countries' telecommunication/  
ICT policies over time, 1997-2013**



Source: Broadband Commission (2013): Planning for Progress; Why National Broadband Plans Matter

Adopting appropriate regulatory tools to respond to new market behaviours and the growing need for consumer protection is becoming an increasingly complex proposition for regulators in today's converged environment. This environment is becoming increasingly complex, with multiple players operating in the same markets, but under different regimes: in the provision of voice services, for example, traditional telecommunication operators are not only competing with players in adjacent markets, such as Internet service providers (ISPs) and cable operators, but with players in the layers above, such as OTT content and application providers.

The nature of telecommunications/ICTs as cross-sectoral and pervasive infrastructure means that telecommunication/ICT regulators are today forced to look beyond traditional models of regulation, which have historically consisted mainly in regulating access to networks and services, ensuring fair competition, protecting the interests of consumers and advancing universal access. More recently, electronic services, cybersecurity, data protection, privacy and environmental issues have entered into the purview of regulators.[[39]](#footnote-39)38 The increased use of online applications and services to communicate and do business (such as social media, cloud services, e-payment and other m-banking services) brings a host of new regulatory issues to the fore.

In this highly dynamic digital environment, regulators need to consider whether they are sufficiently equipped to ensure appropriate operation of markets. They also need to identify whether additional measures should be adopted to help ensure a level playing field among operators. In addition, where public funds are requested, clear policies should be adopted with regard to how these should be used.

To adapt to the changing telecommunication/ICT environment/sector, some governments have continued the move towards reform of their institutional and organizational structures by considering merging multiple, separate regulatory authorities, covering different areas of telecommunications and broadcasting, into converged communication/ICT authorities.[[40]](#footnote-40)39

As many of the services carried over telecommunication/ICT networks are today transnational and borderless in nature, strengthening cross-border, regional and international cooperation will remain key in ensuring that all citizens of the world can benefit from affordable, secure and safe access anytime, anywhere.

Reviewing existing telecommunication/ICT policy and regulatory frameworks to adapt to the fast-changing digital environment is an ongoing process that requires coordination with multiple stakeholders so as to develop forward-looking approaches to attract and secure the huge and sustained investment in networks which is still needed.

Various international organizations, non-governmental organizations, civil society, multinational companies, academia and foundations are taking a role in this increasingly complex telecommunication/ICT environment/sector. For example, the World Bank Group's new ICT Strategy aims at helping developing countries use telecommunications/ICTs to transform delivery of basic services, drive innovations and productivity gains and improve competitiveness.[[41]](#footnote-41)40 Other emerging initiatives, such as public-private and multistakeholder partnerships, can potentially contribute significantly to the changing telecommunication/ICT environment/sector. Therefore, collaboration among various established and new players will be important for the future of the telecommunication/ICT environment/sector.

# 3 Situational analysis of the ITU Sectors

## 3.1 Situational analysis of ITU-R

The biggest challenge for the ITU Radiocommunication Sector (ITU-R) is to remain abreast of the rapid and complex changes occurring in the world of international radiocommunications, coupled with a timely response to the needs of the radiocommunication and broadcasting industry in particular and the membership as a whole. In an environment undergoing constant change and with ever greater demands from its members for products and services, ITU-R should ensure that it remains as adaptable and responsive as possible to meet these challenges.

Pursuant to Article 1 of the ITU Constitution, ITU-R is committed to building an enabling environment through management of the international radio-frequency spectrum and satellite-orbit resources. Since the global management of frequencies and orbit resources requires a high level of international cooperation, one of the principal tasks in ITU-R is to facilitate the complex intergovernmental negotiations needed to develop legally binding agreements between sovereign states. These agreements are embodied in the Radio Regulations and in world and regional plans adopted for different space and terrestrial services.

The field of radiocommunications addresses terrestrial and space services that are critical and increasingly important for the development of the global economy in the twenty-first century. The world is witnessing a phenomenal increase in the use of wireless systems in a myriad of applications. International radiocommunication standards (such as those contained in ITU-R recommendations) underpin the entire global communications framework – and will continue to serve as the platform for a whole range of new wireless applications.

The domain of radiocommunications also includes aeronautical telemetry and telecommand systems, satellite services, mobile communications, maritime distress and safety signals, digital broadcasting, satellites for meteorology, and the prediction and detection of natural disasters.

In line with the Radio Regulations, the registration of space and terrestrial notices and their associated publication are central to ITU-R's mission.

The need for continuing development of radiocommunication systems used in disaster mitigation and relief operations has increased, and will be a key challenge for the future. Telecommunications are critical at all phases of disaster management. Aspects of emergency radiocommunication services associated with disasters include, *inter alia*, disaster prediction, detection, alerting and relief.

In the area of climate change, the work of ITU-R focuses on the use of telecommunications/ICTs (different radio and telecommunication technologies and equipment) for weather and climate-change monitoring and for prediction, detection and mitigation of hurricanes, typhoons, thunderstorms, earthquakes, tsunamis, man-made disasters, etc.

Stakeholders, such as government agencies, public and private telecommunication operators, manufacturers, scientific or industrial bodies, international organizations, consultancies, universities, technical institutions, etc., through the processes linked with world radiocommunication conferences and study groups, will need to continue to make decisions on the most profitable and efficient ways to exploit the limited resource of the radio-frequency spectrum and satellite orbits, which will be critical and of increasing economic value for the development of the global economy in the twenty-first century.

In conducting its activities, ITU-R should ensure to strike a proper balance:

– between the need for worldwide harmonization (to benefit from economies of scale, connectivity and interoperability) and the need for flexibility in spectrum allocations;

– between the need to accommodate new systems, applications and technologies as they arise and the need to protect existing radiocommunication services.

## 3.2 Situational analysis of ITU-T

The ITU Telecommunication Standardization Sector (ITU-T) operates in a competitive, complex and rapidly evolving environment and ecosystem.

There is a need for high-quality, demand-driven international standards, which should be developed rapidly in line with the principles of global connectivity, openness, affordability, reliability, interoperability and security. Key technologies enabling new services and applications and promoting the building of the information society are emerging and should be taken into account in the work of ITU-T.

While retaining current ITU-T members, new members from industry and academia need to be attracted and encouraged, and the participation of developing countries in the standardization process ("Bridging the standardization gap") needs to be boosted.

Cooperation and collaboration with other standardization bodies and relevant consortia and forums are key to minimizing conflict of work and achieving efficient use of resources, as well as incorporating expertise from outside ITU.

The review of the International Telecommunication Regulations will set a renewed worldwide framework for ITU-T activities.

## 3.3 Situational analysis of ITU-D

Telecommunications/ICTs are increasingly being recognized by governments around the world as the key engine for economic growth and social development. Furthering development of telecommunications/ICTs around the world has long been at the core of the work of ITU, as a United Nations specialized agency, but has become even more vital over recent years, as technological developments have given telecommunications/ICTs an essential role in every aspect of human lives. Telecommunications/ICTs are not just an end in themselves, but are key enablers of the other sectors.

The progress that has been made since the establishment of the Millennium Development Goals (MDGs) in 2000 and the telecommunication/ICT connectivity targets set by WSIS in 2003 and 2005 has been extremely important. Providing the right conditions is key to fully meeting these goals. The priority shall be the development of infrastructure, in particular for broadband communications, and the provision of telecommunication/ICT applications and services. The enhancement of human capacity building and a robust, predictable, enabling regulatory environment will ensure that technological development is sustainable.

Having regard to the importance of local content and its role in developing the use of broadband, countries with language and cultural barriers should pay adequate attention to ensuring a significant proportion of local content. Therefore, generating local content as an enabler for developing the deployment of broadband services and enhancing broadband penetration, developing e-health, e-learning and e-commerce to satisfy demand for local content and encouraging countries with similar or common culture and language to construct local content could help speed up continuing access to broadband services.

In view of the borderless nature of the cyberspace community, the ITU Telecommunication Development sector (ITU‑D) acknowledges the importance of international cooperation in enhancing reliability, availability and security in the use of ICTs. Therefore, ITU‑D recognizes that there is an urgent need to support countries in developing specific measures in the implementation of their national cybersecurity frameworks, to address the concerns of different stakeholders in this regard and to enable and assist in the sharing of best practices at the global level. Accordingly, ITU will play a key role in facilitating the above-mentioned cooperation.

Among those standing to derive the greatest benefit from telecommunications/ICTs are least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and countries with economies in transition, all of which deserve special attention. Emergency telecommunications and gender issues are also priority areas in ITU-D work. Given the magnitude of the task, success will depend on working closely with ITU members and mobilizing resources through public-private partnerships.

There is a need to encourage a culture of innovation in ITU-D. Constantly examining the activities of the Telecommunication Development Bureau (BDT) under the lens of how products and services can be more innovative leads to critical consideration of its competitive position among telecommunication/ICT development agencies and provides the motivation to pursue new opportunities for improvement. The growing importance of innovation is recognized worldwide. Innovation is essential if countries and firms are to recover from the global economic downturn and thrive in today's highly competitive and connected global economy. Innovation is a powerful engine for development and for addressing social and economic challenges. Innovative broadband-fuelled services such as m-payments, m-health and m-education can be literally "life-changing" for individuals, communities and societies at large. Access to telecommunications/ICTs can empower hundreds of millions of people in developing countries to directly enhance their own social and economic well-being.

The ITU-D mission is not just about connectivity for connectivity's sake, but is more to aim at seeing innovative uses of telecommunications/ICTs that fundamentally improve people's lives for the better.

Annex 2 to Resolution 71 (REV. BUSAN, 2014)

Strategic plan for the Union for 2016-2019

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The four-year strategy guides the activities of the Union for 2016-2019 in accordance with the ITU Constitution and Convention.

The structure of the strategic plan for the Union for 2016-2019 follows the structure of the ITU results-based management (RBM) framework, as shown in Section 1 below. Section 2 defines the vision, mission and values, Section 3 defines the ITU strategic goals and sets the targets, and Section 4 defines the Sectoral and intersectoral objectives, the outcomes, the enablers of the strategic goals and objectives of the Union and, for purposes of linkage between the strategic and operational plans of the Union, the Sectoral and intersectoral outputs. Section 5 plots the roadmap from strategy to execution, by laying down the implementation criteria for prioritization. The activities and outputs are defined in detail in the operational planning process, thereby ensuring a strong linkage between strategic and operational planning (as described in § 5.1).

# 1 ITU results-based management framework and structure of the strategic plan

The results-based management (RBM) framework presented below describes the relationships between the activities of ITU, the outputs they produce, and the overall objectives and strategic goals of the Union, which contribute to the organization's mission and vision.

The ITU results chain is divided into five levels: *activities*, *outputs*, *objectives* and *outcomes*, *strategic goals* and *targets*, and *vision* and *mission*. The ITU *values* represent overarching shared and common beliefs that drive the Union’s priorities.

Table 1 – The ITU RBM framework (as presented in the ITU strategic   
and operational plans)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **🡨 RBM planning** | **Implementation 🡪** | **Vision & mission** (Section 2) | **Vision** is the better world ITU wants to see.  **Mission** refers to the main overall purposes of the Union, as per the Basic Instruments of ITU. | **Values**: ITU's shared and common beliefs that drive its priorities and guide all decision-making processes (Section 2) |
| **Strategic goals & targets** (Section 3) | **Strategic goals** refer to the Union's high-level targets to which the objectives contribute, directly or indirectly. They relate to the whole of ITU.  **Targets** are the expected results during the period of the strategic plan; they provide an indication as to whether the goal is being achieved. Targets may not always be achieved, for reasons that may be beyond the control of the Union. |
| **Objectives & outcomes** (Section 4) | **Objectives** refer to the specific aims of the Sectoral and intersectoral activities in a given period.  **Outcomes** provide an indication as to whether the objective is being achieved. Outcomes are usually partly, but not entirely, within the organization's control. |
| **Outputs** (Section 4) | **Outputs** are the final tangible results, deliverables, products and services achieved by the Union in the implementation of the operational plans. |
| **Activities** | **Activities** are various actions/services for transforming resources (inputs) into outputs. Activities may be grouped into processes. |

Each of the levels above represents a distinct step in the causal logic of the ITU RBM framework. The bottom two levels (activities and outputs) relate to how financial contributions from the membership and other revenues of ITU are being invested in order to implement various functions, programmes and initiatives of the Union. The top three levels refer to the actual changes and impact that ITU envisages, i.e. the long-term economic, socio-cultural, institutional, environmental, technological or other effects of the Union's work.

# 2 ITU vision, mission and values

## 2.1 Vision

*"An information society, empowered by the interconnected world, where telecommunication/ information and communication technologies enable and accelerate social, economic and environmentally sustainable growth and development for everyone."*

ITU is committed to enabling a connected world. In this interconnected world, information and communication technologies (ICTs) play a key role as an ultimate enabler for social, economic and environmentally sustainable development, benefiting each and every person on the planet. ICTs are redefining how development objectives may be achieved. Delivering affordable access to telecommunication/ICT networks, services and applications for all the world's inhabitants is a vital driver of development.

## 2.2 Mission

*"To promote, facilitate and foster affordable and universal access to telecommunication/ information and communication technology networks, services and applications and their use for social, economic and environmentally sustainable growth and development."*

## 2.3 Values

The core values of ITU are the principles and common beliefs that drive the priorities of the Union and the decision-making process of the organization.

People-centred, service-oriented and results-based

Being people-centred, ITU is focused on people in order to deliver results that matter to each and every individual. Being service-oriented, ITU is committed to further delivering high-quality services and maximizing satisfaction of beneficiaries and stakeholders. Being results-based, ITU aims for tangible results and to maximize the impact of its work.

Inclusiveness

Recognizing inclusiveness as a universal value, ITU is committed to ensuring that the benefits of telecommunications/ICTs reach everyone in an equitable manner, including developing countries[[42]](#footnote-42)\*, persons with specific needs and marginal and vulnerable populations, including youth, indigenous peoples, older persons, persons with disabilities, persons with diverse income levels, rural and remote populations, as well as ensuring gender equality in telecommunications/ICTs. The significance of inclusiveness is twofold: everyone benefits from the work of ITU, and everyone can contribute.

Universality and neutrality

As a United Nations specialized agency, ITU reaches, covers and represents all parts of the world. Within the remit of the Basic Instruments of the Union, its operations and activities reflect the express will of its membership. ITU also recognizes the overarching pre-eminence of human rights, including the right to freedom of opinion and expression, which includes the freedom to seek, receive and impart information and ideas through any media and regardless of frontiers, and the right to not be subjected to arbitrary interference with privacy.

Synergies through collaboration

A diverse array of organizations contribute to the development of telecommunications/ICTs. ITU, as a major player in this diverse environment, embraces collaboration as the best way to contribute to the fulfilment of its mission.

Innovativeness

Innovation is a key element in the transformation of the telecommunication/ICT environment. In order to be successful in what it does, ITU recognizes that it must continuously contribute to shaping and adapting quickly to this rapidly changing telecommunication/ICT environment.

Efficiency

Efficiency is a concern for all stakeholders in the telecommunication/ICT environment. ITU is committed to providing increased value for money, focusing on its priorities and avoiding conflicting efforts and activities.

Continuous improvement

Recognizing that in a fast-moving, rapidly-evolving environment there are no permanent solutions, ITU embraces the value of continuous improvement of its products, services and processes, by adjusting focus as required and raising performance and quality standards.

Transparency

As an enabler for many of the above values, transparency allows accountability for decisions, actions and results. Embracing transparency, ITU communicates and demonstrates progress towards the achievement of its goals.

# 3 Strategic goals and targets of the Union

## 3.1 Strategic goals

The ITU Council, in its role in managing the Union between plenipotentiary conferences, and all three ITU Sectors will cooperate towards achievement of the ITU-wide goals: the ITU Radiocommunication Sector (ITU-R), the ITU Telecommunication Standardization Sector (ITU-T) and the ITU Telecommunication Development Sector (ITU-D). Successful coordination and collaboration among the Sectors, their three Bureaux and the General Secretariat shall underpin the Union's progress in achieving these goals.

In 2016-2019, ITU will work to achieve its mission through the following four goals:

### 3.1.1 Goal 1: Growth – Enable and foster access to and increased use of telecommunications/ICTs

Recognizing the role of telecommunications/ICTs as a key enabler for social, economic and environmentally sustainable development, ITU will work to enable and foster access to, and increase the use of, telecommunications/ICTs. Growth in the use of telecommunications/ICTs has a positive impact on short- and long-term socio-economic development. The Union, including its members, is committed to working together and collaborating with all stakeholders in the telecommunication/ICT environment in order to achieve this goal.

### 3.1.2 Goal 2: Inclusiveness – Bridge the digital divide and provide broadband for all

Being committed to ensuring that everyone without exception benefits from telecommunications/ICTs, ITU will work to bridge the digital divide and enable the provision of broadband for all. Bridging the digital divide focuses on global telecommunication/ICT inclusiveness, fostering telecommunication/ICT access, accessibility, affordability and use in all countries and regions and for all peoples, including marginal and vulnerable populations, such as women, children, people with different income levels, indigenous peoples, older persons and persons with disabilities. The Union will continue to work towards enabling the provision of broadband for all, so everyone can take advantage of these benefits.

### 3.1.3 Goal 3: Sustainability – Manage challenges resulting from telecommunication/ICT development

To promote the beneficial use of telecommunications/ICTs, ITU recognizes the need to manage challenges that emerge from the rapid growth of telecommunications/ICTs. The Union focuses on enhancing the sustainable and safe use of telecommunications/ICTs, in close collaboration with all organizations and entities. Accordingly, the Union will work towards minimizing the negative impact of undesired collaterals, such as cybersecurity threats, including potential harm to the most vulnerable parts of society, in particular children, and negative effects on the environment, including e-waste.

### 3.1.4 Goal 4: Innovation and partnership – Lead, improve and adapt to the changing telecommunication/ICT environment

The fourth goal of ITU’s strategy for 2016-2019 is innovation: fostering an innovative ecosystem and adapting to the changing telecommunication/ICT environment. In the rapidly evolving environment, the goal set by the Union is to contribute to the development of an environment that is sufficiently conducive to innovation, where advances in new technologies and strategic partnerships become a key driver for the post-2015 development agenda. The Union recognizes the global need to adapt systems and practices continuously, since technological innovation is transforming the telecommunication/ICT environment. The Union recognizes the need to foster engagement and cooperation with other entities and organizations in pursuing that goal.

## 3.2 Targets of the Union

Targets represent the effect and long-term impact of ITU’s work and provide an indication of progress towards achievement of the strategic goals. The Union will work collaboratively with the full range of other organizations and entities around the world committed to advancing the use of telecommunications/ICTs. The purpose of such targets is to provide the direction where the Union should focus its attention and to materialize the ITU vision for an interconnected world for the four‑year period of the strategic plan.

### 3.2.1 Principles for global telecommunication/ICT targets

Following best practice for setting targets, the global telecommunication/ICT targets are set in compliance with the following criteria:

– **Specific**: Targets describe the tangible impact that ITU would like to see from its efforts: the long-term economic, socio-cultural, institutional, environmental, technological or other effects sought, which may, however, be largely outside the Union's direct control.

– **Measurable**: Targets build on existing statistical indicators, leveraging ITU knowledge bases, are measurable and have an established baseline.

– **Action-oriented**: Targets guide specific efforts under the strategic and operational plans of the Union.

– **Realistic and relevant**: Targets are ambitious, but realistic, and are linked with the strategic goals of the Union.

– **Time-bound and traceable**: Targets correspond to the time-frame within the four-year period of the strategic plan of the Union, i.e. by 2020.

### 3.2.2 Global telecommunication/ICT targets

Table 2 below presents the global telecommunication/ICT targets for each of the ITU’s strategic goals.

Table 2 – Global telecommunication/ICT targets

|  |
| --- |
| **Goal 1: Growth – Enable and foster access to and increased use of telecommunications/ICTs** |
| – **Target 1.1**: Worldwide, 55 per cent of households should have access to the Internet by 2020  – **Target 1.2**: Worldwide, 60 per cent of individuals should be using the Internet by 2020  – **Target 1.3**: Worldwide, telecommunications/ICTs should be 40 per cent more affordable by 2020[[43]](#footnote-43)41 |
| **Goal 2: Inclusiveness – Bridge the digital divide and provide broadband for all** |
| – **Target 2.1.A**: In the developing world, 50 per cent of households should have access to the Internet by 2020  – **Target 2.1.B**: In the least developed countries (LDCs), 15 per cent of households should have access to the Internet by 2020  – **Target 2.2.A**: In the developing world, 50 per cent of individuals should be using the Internet by 2020  – **Target 2.2.B**: In the least developed countries (LDCs), 20 per cent of individuals should be using the Internet by 2020  – **Target 2.3.A**: The affordability gap between developed and developing countries should be reduced by 40 per cent by 2020[[44]](#footnote-44)42  – **Target 2.3.B**: Broadband services should cost no more than 5 per cent of average monthly income in developing countries by 2020  – **Target 2.4**: Worldwide, 90 per cent of the rural population should be covered by broadband services by 2020[[45]](#footnote-45)43  – **Target 2.5.A**: Gender equality among Internet users should be reached by 2020  – **Target 2.5.B**: Enabling environments ensuring accessible telecommunications/ICTs for persons with disabilities should be established in all countries by 2020 |
| **Goal 3: Sustainability – Manage challenges resulting from the telecommunication/ICT development** |
| – **Target 3.1**: Cybersecurity readiness should be improved by 40 per cent by 2020  – **Target 3.2**: Volume of redundant e-waste to be reduced by 50 per cent by 2020[[46]](#footnote-46)44  – **Target 3.3**: Greenhouse gas emissions generated by the telecommunication/ICT sector to be decreased per device by 30 per cent by 2020[[47]](#footnote-47)45 |
| **Goal 4: Innovation and partnership – Lead, improve and adapt to the changing telecommunication/ICT environment** |
| – **Target 4.1**: Telecommunication/ICT environment conducive to innovation[[48]](#footnote-48)46  – **Target 4.2**: Effective partnerships of stakeholders in the telecommunication/ICT environment[[49]](#footnote-49)47 |

## 3.3 Strategic risk management and mitigation

Bearing in mind the prevailing challenges, evolutions and transformations that have the most potential to impact on ITU activities during the period of the strategic plan, the list of top-level strategic risks presented in Table 3 has been identified, analysed and evaluated. These risks have been considered when planning the strategy for 2016-2019, and the corresponding mitigation measures have been identified as necessary. It should be emphasized that the strategic risks are not meant to represent deficiencies of ITU's operations. They represent forward-looking uncertainties that may affect efforts to fulfil the mission of the Union during the period of the strategic plan.

ITU has identified, analysed and assessed these strategic risks. Apart from the strategic planning processes, setting the overall framework on how to mitigate these risks, operational mitigation measures will be defined and implemented through the operational planning process of the Union.

Table 3 – Strategic risks and mitigation measures

| **Risk** | **Strategic mitigation measure** | **Reflected in** |
| --- | --- | --- |
| **• Diminishing relevance and ability to demonstrate clear added value**  Represents the risk of conflicting efforts, inconsistencies and competition with other relevant organizations and bodies, as well as the risk of misperception of ITU's mandate, mission and role | **1) Identify and concentrate on activities with unique added value** | – Vision, Mission, Strategic goals and Objectives/Outcomes, Criteria for prioritization |
| **• Spreading too thin**  Represents the risk of mission dilution and the risk of losing sight of the organization's core mandate | **2) Ensure cohesiveness and strength of focus** | – Criteria for prioritization |
| **• Failure to respond quickly to emerging needs and innovate sufficiently while still providing high-quality deliverables**  Represents the risk of unresponsiveness, leading to disengagement of membership and other stakeholders | **3) Be fast moving, agile, responsive and innovative**  **4) Proactively engage stakeholders** | – Goal 4 related to Innovation, ITU values  – Vision, Mission, Values, Strategic goals and Objectives/Outcomes, Criteria for prioritization |
| **• Inadequate adjustment of implementation strategies, tools, methodology and processes to keep up with best practices and changing needs**  Represents the risk of the study group structure, methods and tools becoming inadequate, of the implementation tools and methods becoming unreliable and failing to ensure maximum effectiveness, and of inadequate cooperation among the Sectors | **5) Continuously improve strategies, tools, methodologies and processes according to best practice** | – Values, Implementation criteria  – Process of monitoring implementation of, and adjusting, the strategic plan |
| **• Inadequacy of funding**  Represents the risk of reduced financial contributions from membership | **6) Be more efficient and prioritize**  **7) Ensure effective financial planning** | – Implementation criteria |

# 4 Sectoral and intersectoral objectives, outcomes and outputs

ITU will implement the strategic goals of the Union for 2016-2019 through a number of objectives to be attained in this period. Each Sector will contribute to the overarching goals of the Union in the context of its specific remit, through implementation of the Sector-specific objectives and the overarching intersectoral objectives. The Council will ensure efficient coordination and oversight of this work.

## 4.1 Sectoral and intersectoral objectives

Sectoral and intersectoral objectives will contribute to the ITU strategic goals as presented in Table 4 below,[[50]](#footnote-50)48 supported by the enablers of the goals and the objectives of the Union provided by the secretariat.

Table 4 – Linkage of Sectoral and intersectoral objectives to ITU strategic goals

|  | | **Goal 1: Growth** | **Goal 2: Inclusiveness** | **Goal 3: Sustainability** | **Goal 4: Innovation & partnership** |
| --- | --- | --- | --- | --- | --- |
| **Objectives** | **ITU-R objectives** |  |  |  |  |
| R.1 Meet, in a rational, equitable, efficient, economical and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference | ☑ | 🗸 | 🗸 | 🗸 |
| R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability and timeliness of service and overall system economy in radiocommunications, including through the development of international standards | ☑ | 🗸 | 🗸 | 🗸 |
| R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications |  | ☑ |  |  |
| **ITU-T objectives** |  |  |  |  |
| T.1 Develop non-discriminatory international standards (ITU-T recommendations), in a timely manner, and foster interoperability and improved performance of equipment, networks, services and applications | ☑ | 🗸 | 🗸 | 🗸 |
| T.2 Promote the active participation of the membership, in particular developing countries, in the definition and adoption of non-discriminatory international standards (ITU-T recommendations) with a view to bridging the standardization gap |  | ☑ |  |  |
| T.3 Ensure effective allocation and management of international telecommunication numbering, naming, addressing and identification resources in accordance with ITU-T recommendations and procedures | ☑ | 🗸 | 🗸 | 🗸 |
| T.4 Foster the acquisition and sharing of knowledge and know-how on the standardization activities of ITU-T | 🗸 | ☑ | 🗸 | 🗸 |
| T.5 Extend and facilitate cooperation with international, regional and national standardization bodies | 🗸 | 🗸 | 🗸 | ☑ |
|  | **ITU-D objectives** |  |  |  |  |
| D.1 Foster international cooperation on telecommunication/ICT development issues |  | ☑ |  |  |
| D.2 Foster an enabling environment for ICT development and foster the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap | ☑ |  |  |  |
| D.3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services |  |  | ☑ |  |
| D.4 Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need |  | ☑ |  |  |
| D.5 Enhance environmental protection, climate-change adaptation and mitigation and disaster-management efforts through telecommunications/ICTs | ☑ |  |  |  |
| **Intersectoral objectives** |  |  |  |  |
| I.1 Enhance international dialogue among stakeholders | 🗸 | 🗸 | 🗸 | ☑ |
| I.2 Enhance partnerships and cooperation within the telecommunication/ICT environment | 🗸 | 🗸 | 🗸 | ☑ |
| I.3 Enhance identification and analysis of emerging trends in the telecommunication/ICT environment | 🗸 | 🗸 | 🗸 | ☑ |
| I.4 Enhance/promote recognition of (importance of) telecommunications/ICTs as a key enabler of social, economic and environmentally sustainable development |  | ☑ | ☑ |  |
| I.5 Enhance access to telecommunications/ICTs for persons with disabilities and specific needs |  | ☑ |  |  |
| **Enablers** | – Ensure efficient and effective use of human, financial and capital resources, as well as a work-conducive, safe and secure working environment  – Ensure efficient and accessible conferences, meetings, documentation, publications and information infrastructures  – Ensure efficient membership-related, protocol, communication and resource-mobilization services  – Ensure efficient planning, coordination and execution of the strategic plan and operational plans of the Union  – Ensure effective and efficient governance of the organization (internal and external) | | | | |

## 4.2 Objectives, outcomes and outputs

The Sectoral and intersectoral objectives will be met by achieving the related outcomes, implemented by means of the outputs presented in the table below:

Table 5 – Objectives, outcomes and outputs

| **Objective** | **Outcomes** | **Outputs** |
| --- | --- | --- |
| **ITU-R objectives** | | |
| **R.1 Meet, in a rational, equitable, efficient, economical and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference** | R.1-1: Increased number of countries having satellite networks and earth stations recorded in the Master International Frequency Register (MIFR)  R.1-2: Increased number of countries having terrestrial frequency assignments recorded in the MIFR  R.1-3: Increased percentage of assignments recorded in the MIFR with a favourable finding  R.1-4: Increased percentage of countries which have completed the transition to digital terrestrial television broadcasting  R.1-5: Increased percentage of spectrum assigned to satellite networks which is free from harmful interference  R.1-6: Increased percentage of assignments to terrestrial services recorded in the MIFR which are free from harmful interference | – Final acts of world radiocommunication conferences, updated Radio Regulations  – Final acts of regional radiocommunication conferences, regional agreements  – Rules of Procedure adopted by the Radio Regulations Board (RRB)  – Results of the processing of space notices and other related activities  – Results of the processing of terrestrial notices and other related activities  – RRB decisions other than the adoption of Rules of Procedure  – Improvement of ITU-R software |
| **R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability and timeliness of service and overall system economy in radiocommunications, including through the development of international standards** | R.2-1: Increased mobile-broadband access, including in frequency bands identified for international mobile telecommunications (IMT)  R.2-2: Reduced mobile-broadband price basket[[51]](#footnote-51)49, as a percentage of gross national income (GNI) per capita  R.2-3: Increased number of fixed links and increased amount of traffic handled by the fixed service (Tbit/s)  R.2-4: Number of households with digital terrestrial television reception  R.2-5: Number of satellite transponders (equivalent 36 MHz) in operation and corresponding capacity (Tbit/s); Number of VSAT terminals; Number of households with satellite television reception  R.2-6: Increased number of devices with radionavigation-satellite reception  R.2-7: Number of Earth exploration satellites in operation, corresponding quantity and resolution of transmitted images and data volume downloaded (Tbytes) | – Decisions of the Radiocommunication Assembly, ITU-R resolutions  – ITU-R recommendations, reports (including the CPM report) and handbooks  – Advice from the Radiocommunication Advisory Group |
|  |
| **R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications** | R.3-1: Increased knowledge and know-how on the Radio Regulations, Rules of Procedure, regional agreements, recommendations and best practices on spectrum use  R.3-2: Increased participation in ITU-R activities (including through remote participation), in particular by developing countries | – ITU-R publications  – Assistance to members, in particular developing countries and LDCs  – Liaison/support to development activities  – Seminars, workshops and other events |

| **Objective** | | **Outcomes** | | | | **Outputs** |
| --- | --- | --- | --- | --- | --- | --- |
| **ITU-T objectives** | | | | | | |
| **T.1 Develop non-discriminatory international standards (ITU-T recommendations), in a timely manner, and foster interoperability and improved performance of equipment, networks, services and applications** | | T.1-1: Increased utilization of ITU-T recommendations  T.1-2: Improved conformance to ITU-T recommendations  T.1-3: Enhanced standards in new technologies and services | | | | – Resolutions, recommendations and opinions of the World Telecommunication Standardization Assembly (WTSA)  – WTSA regional consultation sessions  – Advice and decisions of the Telecommunication Standardization Advisory Group (TSAG)  – ITU-T recommendations and related results of ITU-T study groups  – ITU-T general assistance and cooperation  – Conformity database  – Interoperability test centres and events  – Development of test suites |
| **T.2 Promote the active participation of the membership, in particular developing countries, in the definition and adoption of non-discriminatory international standards (ITU-T recommendations) with a view to bridging the standardization gap** | | T.2-1: Increased participation in the ITU-T standardization process, including attendance of meetings, submission of contributions, taking leadership positions and hosting of meetings/workshops, especially from developing countries  T.2-2: Increase of the ITU-T membership, including Sector Members, Associates and Academia | | | | – Bridging the standardization gap (e.g. remote participation, fellowships, establishment of regional study groups)  – Workshops and seminars, including offline and online training activities, complementing the capacity-building work on bridging the standardization gap undertaken in ITU-D  – Outreach and promotion |
| **T.3 Ensure effective allocation and management of international telecommunication numbering, naming, addressing and identification resources in accordance with ITU-T recommendations and procedures** | | T.3-1: Timely and accurate allocation of international telecommunication numbering, naming, addressing and identification resources, as specified in the relevant recommendations | | | | – Relevant TSB databases  – Allocation and management of international telecommunication numbering, naming, addressing and identification resources in accordance with ITU-T recommendations and procedures |
| **T.4 Foster the acquisition and sharing of knowledge and know-how on the standardization activities of ITU-T** | | T.4-1: Increased knowledge on ITU-T standards and on best practices in their implementation of ITU-T standards  T.4-2: Increased participation in ITU-T's standardization activities and increased awareness of the relevance of ITU-T standards  T.4-3: Increased Sector visibility | | | | – ITU-T publications  – Database publications  – Outreach and promotion  – ITU Operational Bulletin |
| **T.5 Extend and facilitate cooperation with international, regional and national standardization bodies** | | T.5-1: Increased communications with other standards organizations  T.5-2: Decreased number of conflicting standards  T.5-3: Increased number of memoranda of understanding/collaboration agreements with other organizations  T.5-4: Increased number of ITU-T A.4, A.5 and A.6 qualified organizations  T.5-5: Increased number of workshops/events organized jointly with other organizations | | | | – Memoranda of understanding (MoUs) and collaboration agreements  – ITU-T A.4/A.5/A.6 qualifications  – Jointly organized workshops/events |
| **ITU-D objectives**[[52]](#footnote-52)50 | | | | | | |
| **D.1 Foster international cooperation on telecommunication/ICT development issues** | | D.1-1: Draft strategic plan for ITU-D  D.1-2: WTDC Declaration  D.1-3: WTDC Action Plan  D.1-4: Resolutions and recommendations  D.1-5: New and revised Questions for study groups  D.1-6: Increased level of agreement on priority areas  D.1-7: Assessment of the implementation of the Action Plan and of the WSIS Plan of Action  D.1-8: Identification of regional initiatives  D.1-9: Increased number of contributions and proposals for the Action Plan  D.1-10: Enhanced review of priorities, programmes, operations, financial matters and strategies  D.1-11: Work programme  D.1-12: Comprehensive preparation of progress report to the Director of BDT on the implementation of the work programme  D.1-13: Enhanced knowledge-sharing and dialogue among Member States and Sector Members (including Associates and Academia) on emerging telecommunication/ICT issues for sustainable growth  D.1-14: Strengthened capacity of members to develop and implement ICT strategies and policies as well as to identify methods and approaches for the development and deployment of infrastructure and applications | – World Telecommunication Development Conference (WTDC)  – Regional preparatory meetings (RPMs)  – Telecommunication Development Advisory Group (TDAG)  – Study groups | | | |
| **D.2 Foster an enabling environment for ICT development and foster the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap** | | D.2-1: Enhanced dialogue and cooperation among national regulators, policy-makers and other telecommunication/ICT stakeholders on topical policy, legal and regulatory issues to help countries achieve their goals of creating a more inclusive information society  D.2-2: Improved decision-making on policy and regulatory issues and conducive policy, legal and regulatory environment for the ICT sector  D.2-3: Enhanced awareness and capability of countries to enable planning, deployment, operation and maintenance of sustainable, accessible and resilient ICT networks and services, including broadband infrastructure, and improved knowledge of available broadband transmission infrastructure worldwide  D.2-4: Enhanced awareness and capability of countries to participate in and contribute to the development and deployment of ITU recommendations and put in place sustainable and appropriate conformance and interoperability programmes, on the basis of ITU recommendations, at national, regional and subregional levels by promoting the establishment of mutual recognition agreement (MRA) regimes and/or building testing labs, as appropriate  D.2-5: Enhanced awareness and capability of countries in the fields of frequency planning and assignment, spectrum management and radio monitoring, in efficient utilization of tools for managing the spectrum and in measurement and regulation related to human exposure to electromagnetic fields (EMF) | – Policy and regulatory frameworks  – Telecommunication/ICT networks, including conformance and interoperability and bridging the standardization gap  – Innovation and partnership | | | |
|  | | D.2-6: Enhanced awareness and capability of countries in the transition from analogue to digital broadcasting and in post-transition activities, and effectiveness of implementation of the guidelines prepared  D.2-7: Strengthened members' capacity to integrate telecommunication/ICT innovation in national development agendas  D.2-8: Enhanced public-private partnership to foster the development of telecommunications/ICTs | | | |  |
| **D.3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services** | | D.3-1: Strengthened capacity of Member States to incorporate and implement cybersecurity policies and strategies into nationwide ICT plans, as well as appropriate legislation  D.3-2: Enhanced ability of Member States to respond to cyberthreats in a timely manner  D.3-3: Enhanced cooperation, information exchange and know-how transfer among Member States and with relevant players | | | | – Building confidence and security in the use of ICTs  – ICT applications and services |
|  | | D.3-4: Improved capacity of countries for the planning of national sectoral e-strategies to foster the enabling environment for upscaling ICT applications  D.3-5: Improved capacity of countries to leverage ICT/mobile applications to improve the delivery of value-added services in high-priority areas (e.g. health, governance, education, payments, etc.) in order to provide effective solutions for various challenges in sustainable development through public-private collaboration  D.3-6: Enhanced innovation, knowledge and skills of national institutions to use ICT and broadband for development | | | |  |
| **D.4 Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need** | | D.4-1: Enhanced capacity building of membership in international Internet governance  D.4-2: Improved knowledge and skills of ITU membership in the use of telecommunications/ICTs  D.4-3: Enhanced awareness of the role of human and institutional capacity building for telecommunications/ICTs and development for the ITU membership | | | | – Capacity building  – Telecommunication/ICT statistics  – Digital inclusion of people with specific needs  – Concentrated assistance to least developed countries (LDCs), small island developing states (SIDS) and landlocked developing countries (LLDCs) |
|  | | D.4-4: Enhanced information and knowledge of policy-makers and other stakeholders on current telecommunication/ICT trends and developments, based on high-quality, internationally comparable telecommunication/ICT statistics and data analysis  D.4-5: Enhanced dialogue between telecommunication/ICT data producers and users and increased capacity and skills of producers of telecommunication/ICT statistics to carry out data collections at the national level based on international standards and methodologies  D.4-6: Strengthened capacity of Member States to develop and implement digital inclusion policies, strategies and guidelines to ensure telecommunication/ICT accessibility for people with specific needs[[53]](#footnote-53)51 and the use of telecommunications/ICTs for the social and economic empowerment of people with specific needs | | | |  |
|  | | D.4-7: Improved capacity of members to provide people with specific needs with digital literacy training and training on the use of telecommunications/ICTs for social and economic development  D.4-8: Improved capacity of members in using telecommunications/ICTs for the social and economic development of people with specific needs, including telecommunication/ICT programmes to promote youth employment and entrepreneurship  D.4-9: Improved access to and use of telecommunications/ICTs in LDCs, SIDS, LLDCs and countries with economies in transition  D.4-10: Enhanced capacity of LDCs, SIDS and LLDCs on telecommunication/ICT development | |  | | |
| **D.5 Enhance environmental protection, climate-change adaptation and mitigation and disaster-management efforts through telecommunications/ ICTs** | D.5-1: Improved availability of information and solutions for Member States, regarding climate-change mitigation and adaptation  D.5-2: Enhanced capacity of Member States in relation to climate-change mitigation and adaptation policy and regulatory frameworks  D.5-3: Development of e-waste policy  D.5-4: Developed standards-based monitoring and early-warning systems linked to national and regional networks  D.5-5: Collaboration to facilitate emergency disaster response  D.5-6: Established partnerships among relevant organizations dealing with the use of telecommunication/ICT systems for the purpose of disaster preparedness, prediction, detection and mitigation  D.5-7: Increased awareness of regional and international cooperation for easy access to, and sharing of, information related to the use of telecommunications/ICTs for emergency situations | | | | – ICTs and climate-change adaptation and mitigation  – Emergency telecommunications | |

| **Objective** | **Outcomes** | | **Outputs** |
| --- | --- | --- | --- |
| **Intersectoral objectives** | | | |
| **I.1 Enhance international dialogue among stakeholders** | I.1-1: Increased collaboration among relevant stakeholders, aiming to improve the efficiency of the telecommunication/ICT environment | | – Intersectoral world conferences, forums, events and platforms for high-level debate (such as World Conference on International Telecommunications (WCIT), World Telecommunication/ICT Policy Forum (WTPF), World Summit on the Information Society (WSIS)[[54]](#footnote-54)52, World Telecommunication and Information Society Day (WTISD), ITU Telecom) |
| **I.2 Enhance partnerships and cooperation within the telecommunication/ICT environment** | I.2-1: Increased synergies from partnerships on telecommunications/ICTs | | – Knowledge-sharing, networking and partnerships  – Memoranda of understanding (MoUs) |
| **I.3 Enhance identification and analysis of emerging trends in the telecommunication/ICT environment** | | I.3-1: Timely identification and analysis of emerging trends in telecommunications/ICTs and establishment of new areas of activities related to them | – Intersectoral initiatives and reports on emerging telecommunication/ICT trends and other similar initiatives (including ITU News) |
| **I.4 Enhance/promote recognition of (the importance of) telecommunications/ICTs as a key enabler of social, economic and environmentally sustainable development** | | I.4-1: Increased multilateral and intergovernmental recognition of telecommunications/ICTs as a cross-cutting enabler for all three pillars of sustainable development (economic growth, social inclusion and environmental balance), as defined in the outcome document of the United Nations Rio+20 Sustainable Development Conference, and in support of the United Nations mission of peace, security and human rights | – Reports and other inputs to UN inter-agency, multilateral and intergovernmental processes |

| **Objective** | **Outcomes** | **Outputs** |
| --- | --- | --- |
| **I.5 Enhance access to telecommunications/ICTs for persons with disabilities and specific needs** | I.5-1 Increased availability and compliance of telecommunication/ICT equipment, services and applications with universal design principles  I.5-2 Increased engagement of organizations of persons with disabilities and specific needs in the work of the Union  I.5-3 Increased awareness, including multilateral and intergovernmental recognition, of the need to enhance access to telecommunications/ICTs for persons with disabilities and specific needs | – Reports, guidelines, and checklists relating to accessibility of telecommunications/ICTs  – Mobilization of resources and technical expertise, for example, through promoting greater participation in international and regional meetings by persons with disabilities and specific needs  – Further development and implementation of the ITU Accessibility Policy and related plans  – Advocacy, both at UN level and at regional and national levels |
| The following outputs of the activities of the ITU governing bodies contribute to the implementation of all the objectives of the Union: | | – Decisions, resolutions, recommendations and other results of the Plenipotentiary Conference  – Decisions and resolutions of the Council, as well as results of the Council working groups |

## 4.3 Enablers

The aim of the enablers of the strategic goals and the objectives of the Union is to support ITU activities, towards achieving the objectives and strategic goals. The support processes contribute to the enablers of the strategic goals as presented in the table below:

Table 6 – Support processes contribution to enablers

| **Enablers**  **of the strategic goals**  **Support processes** | **Ensure efficient and effective use of human, financial and capital resources,  as well as  a work-conducive, safe and secure working environment** | **Ensure efficient and accessible conferences, meetings, documentation, publications and information infrastructures** | **Ensure efficient membership-related, protocol, communication and resource-mobilization services** | **Ensure efficient planning, coordination and execution of the strategic plan and operational plans of the Union** | **Ensure effective and efficient governance of the organization (internal and external)** |
| --- | --- | --- | --- | --- | --- |
| Management of the Union | X |  |  | X | X |
| Organization of conferences, assemblies, seminars and workshops (including translation and interpretation) |  | X |  |  |  |
| Publication services |  | X |  |  |  |
| IT services |  | X |  |  |  |
| Human resources management | X |  |  |  |  |
| Financial resources management | X |  |  |  |  |
| Legal services |  |  |  |  | X |
| Internal audit | X |  |  |  | X |
| Engagement with the membership and external stakeholders (including UN) |  |  | X |  |  |
| Communication services (audiovisual services, press release services, social media, management of the web, branding, speechwriting, ICT Discovery) |  |  | X |  |  |
| Protocol services |  |  | X |  |  |
| Facilitation of the work of governing bodies (PP, Council, Council working groups) |  |  |  |  | X |
| Safety and security services | X |  |  |  |  |
| Badging production and distribution |  | X |  |  |  |
| Resource-mobilization services |  |  | X |  |  |
| Corporate strategic management and planning |  |  |  | X | X |

# 5 Implementation and evaluation

## 5.1 Linkage between strategic, operational and financial planning

The strong and coherent linkage between the Union's strategic, operational and financial planning is ensured by implementing the ITU results-based management (RBM) framework in accordance with Resolutions 71, 72 and 151 (Rev. Busan, 2014) of the Plenipotentiary Conference, as per the following structure:

• This four-year **strategic plan** defines the strategic goals of the Union and the Sectoral and intersectoral objectives/outcomes for the four-year period. It lays down the **implementation criteria** to be taken into consideration in the operational planning and budgeting processes. The strategic plan should be implemented within the context of the financial limits established by the Plenipotentiary Conference.

• The four-year **financial plan** in Decision 5 (Rev. Busan, 2014) of the Plenipotentiary Conference forecasts revenue and expenses for the four-year period, in full consistency with the strategic plan, and defines resources available for its implementation.

• Biennial **budgets**, approved by the Council, implement the results-based budgeting (RBB) mechanism, according to the provisions of the financial plan.

• The four-year rolling **operational plans**, approved by the Council, follow the principles of the strategic plan and are set in accordance to the financial plan and the biennial budget. Operational plans define the Sectoral and intersectoral outputs produced to achieve the Union's objectives and outcomes, and describe the corresponding activities of the Bureaux and the General Secretariat. The activities of the Bureaux contribute directly to Sectoral or intersectoral outputs. The activities of the General Secretariat either contribute directly to the intersectoral outputs (via intersectoral activities) or provide support services to the Bureaux and the intersectoral activities, as depicted below:

Figure 3 – Linkage between strategic, operational and financial planning



## 5.2 Implementation criteria

Implementation criteria set the framework to enable proper identification of appropriate activities of the Union, so that the objectives, outcomes and strategic goals of the Union are achieved in the most effective and efficient manner. They define the criteria for establishing priorities for the resource-allocation process within the biennial budget of the Union.

The implementation criteria set for the Union's strategy for 2016-2019 are:

• **Adherence to ITU values**: The core values of ITU shall drive priorities and provide the basis for decision-making.

• **Following results-based management principles**, including:

– **Performance monitoring and evaluation**: Performance in the achievement of the goals/objectives shall be monitored and evaluated in accordance with the operational plans, as approved by the Council, and opportunities for improvement shall be identified, in order to support the decision-making process.

– **Risk identification, assessment and treatment**: An integrated process to manage uncertain events that may impact on the achievement of objectives and goals shall be in place, to enhance informed decision-making.

– **Results-based budgeting principles**: The budgeting process shall allocate resources on the basis of the goals and objectives to be achieved, as defined within this strategic plan.

– **Impact-oriented reporting**: Progress towards the achievement of ITU's strategic goals shall be clearly reported, focusing on the impact of the activities of the Union.

• **Implementing efficiently**: Efficiency has become an overarching imperative for the Union. ITU shall assess whether its stakeholders obtain maximum benefit from the services ITU provides, according to the resources available (value for money).

• **Aiming to mainstream UN recommendations and apply harmonized business practices**, since ITU is part of the UN system as a UN specialized agency.

• **Working as One ITU**: The Sectors shall work cohesively for the implementation of the strategic plan. The secretariat shall support coordinated operational planning, avoiding redundancies and duplication and maximizing synergies across the Sectors, the Bureaux and the General Secretariat.

• **Long-term development of the organization to sustain performance and relevance of expertise**: Aspiring to the concept of the learning organization, the organization shall continue operating in an interconnected way and to invest further in staff so as to sustainably deliver most value.

• **Prioritization**: It is important to define specific criteria for prioritizing among different activities and initiatives that the Union is willing to undertake. The factors to be considered are the following:

**– Added value**:

• Prioritize based on unique value contribution by ITU (outcomes that cannot be achieved otherwise)

• Be involved where and to the extent that ITU adds significant value

• Not prioritize activities that other stakeholders can undertake

• Prioritize based on ITU's available expertise for implementation.

**– Impact and focus**:

• Focus on maximum impact for the wider constituency, while considering inclusiveness

• Undertake fewer activities with greater impact, rather than many activities with diluted impact

• Be consistent and undertake activities that clearly contribute to the big picture as determined by the ITU strategic framework

• Give priority to activities yielding tangible results.

**– Membership needs**:

• Prioritize membership demands, by following a customer-oriented approach

• Give priority to activities that Member States cannot implement without the support of the organization.

## 5.3 Monitoring, evaluation and risk management in the ITU results-based management framework

Results will be the main focus of strategy, planning and budgeting in the ITU RBM framework. Performance monitoring and evaluation, together with risk management, will ensure that the strategic, operational and financial planning processes are based on informed decision-making and appropriate resource allocation.

The ITU performance monitoring and evaluation framework will be further developed according to the strategic framework outlined in the strategic plan for 2016-2019, to measure progress towards achievement of the ITU objectives and outcomes, strategic goals and targets set out therein, evaluating performance and detecting issues that need to be addressed.

The ITU risk-management framework will be further developed, to ensure an integrated approach to the ITU RBM framework set in the strategic plan for the Union for 2016-2019.

Annex 3 to Resolution 71 (REV. BUSAN, 2014)

Allocation of resources to objectives and strategic goals



Annex 4 to Resolution 71 (REV. BUSAN, 2014)

Glossary of the strategic plan for the Union for 2016-2019

| **Term** | **Working Version** |
| --- | --- |
| Activities | Activities are various actions/services for transforming resources (inputs) into outputs. |
| Financial plan | The financial plan covers a four-year period and sets up the financial basis from which biennial budgets can be elaborated.  The financial plan is elaborated within the context of Decision 5 (Revenue and expenses for the Union) which reflects, *inter alia*, the amount of the contributory unit approved by the Plenipotentiary Conference.  It should be aligned with the strategic plan. |
| Inputs | Inputs are resources, such as financial, human, material and technological resources, used by activities to produce outputs. |
| Mission | Mission refers to the main overall purposes of the Union, as per the Basic Instruments of ITU. |
| Objectives | Objectives refer to the specific aims of the Sectoral and intersectoral activities in a given period. |
| Operational plan | The operational plan is prepared on a yearly basis by each Bureau, in consultation with the relevant advisory group, and by the General Secretariat, in accordance with the strategic and financial plans. It contains the detailed plan for the subsequent year and a forecast for the following three‑year period for each Sector and the General Secretariat. The Council reviews and approves the four-year rolling operational plans. |
| Outcomes | Outcomes provide an indication as to whether the objective is being achieved. Outcomes are usually partly, but not entirely, within the control of the organization. |
| Outputs | The outputs are the final tangible results, deliverables, products and services achieved by the Union in the implementation of the operational plans. Outputs are cost objects and are represented in the applicable cost-accounting system by internal orders. |
| Performance indicators | Performance indicators are the criteria used to measure the achievement of outputs or outcomes. These indicators may be qualitative or quantitative. |
| Processes | Set of consistent activities intended to meet an intended objective/goal. |
| Results-based budgeting (RBB) | Results-based budgeting (RBB) is the programme budget process in which (a) the programme is formulated in order to meet a set of predefined objectives and outcomes; (b) the outcomes justify resource requirements, which are derived from and linked to outputs produced to achieve the outcomes; and (c) actual performance in achieving outcomes is measured by outcome indicators. |
| Results-based management (RBM) | Results-based management is a management approach that directs organizational processes, resources, products and services towards the achievement of measurable results. It provides the management frameworks and tools for strategic planning, risk management, performance monitoring and evaluation and financing activities based on targeted results. |
| Results framework | A results framework is the strategic management tool used to plan, monitor, evaluate and report within the RBM methodology. It provides the necessary sequence to achieve desired results (results chain) – beginning with inputs, moving through activities and outputs, to outcomes – at the level of Sectoral and intersectoral objectives, and desired impact – at the level of ITU‑wide strategic goals and targets. It explains how results are to be achieved, including causal relationships and underlying assumptions and risks. The results framework reflects strategic level thinking across the entire organization. |
| Strategic goals | Strategic goals refer to the Union's high-level targets to which the objectives contribute, directly or indirectly. These relate to the whole of ITU. |

| **Term** | **Working Version** |
| --- | --- |
| Strategic plan | The strategic plan defines the strategy of the Union for a four-year period in order to fulfil its mission. It defines strategic goals and objectives and represents the plan of the Union within that period. It is the main instrument embodying the Union's strategic vision. The strategic plan should be implemented within the context of the financial limits established by the Plenipotentiary Conference. |
| Strategic risks | Strategic risks refer to the uncertainties and untapped opportunities that affect an organization's strategy and strategy execution. |
| Strategic risk management (SRM) | Strategic risk management is a management practice that identifies and focuses action on uncertainties and untapped opportunities that affect an organization's ability to deliver on its mission. |
| Strategic target | Strategic targets are the expected results during the period of the strategic plan; they provide an indication as to whether the goal is being achieved. Targets may not always be achieved for reasons that may be beyond the control of the Union. |
| Values | ITU's shared and common beliefs that drive its priorities and guide all decision-making processes. |
| Vision | The better world ITU wants to see. |

List of terms in all six official languages

| **Anglais** | **Arabe** | **Chinois** | **Français** | **Russe** | **Espagnol** |
| --- | --- | --- | --- | --- | --- |
| Activities | الأنشطة | 活动 | Activités | Виды деятельности | Actividades |
| Financial plan | الخطة المالية | 财务规划 | Plan financier | Финансовый план | Plan Financiero |
| Inputs | المدخلات | 投入，输入意见（取决于上下文） | Contributions | Исходные ресурсы | Insumos |
| Mission | الرسالة | 使命 | Mission | Миссия | Misión |
| Objectives | الأهداف | 部门目标 | Objectifs | Задачи | Objetivos |
| Operational plan | الخطة التشغيلية | 运作规划 | Plan opérationnel | Оперативный план | Plan Operacional |
| Outcomes | النتائج | 结果 | Résultats | Конечные результаты | Resultados |
| Outputs | النواتج | 输出成果 | Produits | Намеченные результаты деятельности | Productos |
| Performance indicators | مؤشرات الأداء | 绩效指标 | Indicateurs de performance | Показатели деятельности | Indicadores de Rendimiento |
| Processes | العمليات | 进程 | Processus | Процессы | Procesos |
| Results-based budgeting | الميزنة على أساس النتائج | 基于结果的预算制定 | Budgétisation axée sur les résultats | Составление бюджета, ориентированного на результаты | Elaboración del Presupuesto basado en los resultados |
| Results-based management | الإدارة على أساس النتائج | 基于结果的管理 | Gestion axée sur les résultats | Управление, ориентированное на результаты | Gestión basada en los resultados |
| Results framework | إطار النتائج | 结果框架 | Cadre de présentation des résultats | Структура результатов | Marco de resultados |
| Strategic goals | الغايات الاستراتيجية | 总体战略目标 | Buts stratégiques | Стратегические цели | Metas estratégicas |
| Strategic plan | الخطة الاستراتيجية | 战略规划 | Plan stratégique | Стратегический план | Plan Estratégico |
| Strategic risks | المخاطر الاستراتيجية | 战略风险 | Risques stratégiques | Стратегические риски | Riesgos estratégicos |
| Strategic risk management | إدارة المخاطر الاستراتيجية | 战略风险管理 | Gestion des risques stratégiques | Управление стратегическими рисками | Gestión de riesgos estratégicos |
| Strategic target | المقاصد الاستراتيجية | 具体战略目标 | Cible stratégique | Стратегический целевой показатель | Finalidad estratégica |
| Values | القيم | 价值/价值观 | Valeurs | Ценности | Valores |
| Vision | الرؤية | 愿景 | Vision | Концепция | Visión |

1. 1 Broadband Commission for Digital Development (2013): The State of Broadband 2013: Universalizing Broadband. [↑](#footnote-ref-1)
2. \* These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-2)
3. 2 ITU management decided to put the strategic plan for 2012-2015 into place as from 2011, by starting to evaluate and report the activities of the Union according to the structure of the new plan. [↑](#footnote-ref-3)
4. 3 Ericsson Traffic Mobility Report. [↑](#footnote-ref-4)
5. 4 Pyramid Research quarterly mobile data forecast, February 2013. [↑](#footnote-ref-5)
6. 5 Emeka Obiodu and Jeremy Green (2012): The Future of Voice, OVUM. [↑](#footnote-ref-6)
7. 6 Saul Berman, Lynn Kesterson-Townes, Anthony Marshall and Robini Srivathsa (2012): The power of Cloud: Driving business model innovation. IBM Global Business Services. [↑](#footnote-ref-7)
8. 7 ITU and CISCO Visual networking index (VNI). [↑](#footnote-ref-8)
9. 8 Cisco Visual Networking Index: Forecast and Methodology, 2011-2016. [↑](#footnote-ref-9)
10. 9 Sources: McKinsey Global Institute, Twitter, Cisco, Gartner, EMC, SAS, IBM, MEPTEC, QAS. [↑](#footnote-ref-10)
11. 10 Cisco Visual Networking Index: Forecast and Methodology, 2011-2016. [↑](#footnote-ref-11)
12. 11 Definition by Gartner. [↑](#footnote-ref-12)
13. 12 Sources: McKinsey Global Institute, Twitter, Cisco, Gartner, EMC, SAS, IBM, MEPTEC, QAS. [↑](#footnote-ref-13)
14. 13 World Trade Organization (2013): World Trade Report 2013. [↑](#footnote-ref-14)
15. 14 Qiang (2009), as referred to in World Bank (2009): Information and Communications for Development 2009. [↑](#footnote-ref-15)
16. 15 McKinsey Global Institute (2013): "Disruptive technologies: Advances that will transform life, business, and the global economy". [↑](#footnote-ref-16)
17. 16 *Ibid.* [↑](#footnote-ref-17)
18. 17 Broadband Commission (2013): The State of Broadband 2013: Universalizing Broadband. [↑](#footnote-ref-18)
19. 18 GSMA/PwC (2012): Touching Lives through Mobile Health: Assessment of the Global Market Opportunity. [↑](#footnote-ref-19)
20. 19 McKinsey & Company (2009): Mobile broadband for the masses. [↑](#footnote-ref-20)
21. 20 The Broadband Commission (2012): The Broadband Bridge: Linking ICT with Climate Action for a Low-Carbon Economy. [↑](#footnote-ref-21)
22. 21 GSMA/Cherie Blair Foundation for Women (2010) [↑](#footnote-ref-22)
23. 22 Broadband Commission (2013): The State of Broadband 2013: Universalizing Broadband [↑](#footnote-ref-23)
24. 23 ITU (2013): ICT Facts and Figures [↑](#footnote-ref-24)
25. 24 Intel, "Women and the Web" report, January 2013 [↑](#footnote-ref-25)
26. 25 Synthesis report of the ICT Consultation in support of the High-Level Meeting on Disability and Development of the sixty-eighth session of the United Nations General Assembly (2013): The ICT Opportunity for a Disability-inclusive Development framework. [↑](#footnote-ref-26)
27. 26 McAfee, Center for Strategic and International Studies (2013): The economic impact of cybercrime and cyber espionage, July 2013 [↑](#footnote-ref-27)
28. 27 World Economic Forum in collaboration with McKinsey & Company: Risk and Responsibility in a Hyperconnected World, January 2014 [↑](#footnote-ref-28)
29. 28 Symantec Intelligence Report: January 2013 [↑](#footnote-ref-29)
30. 29 World Economic Forum in collaboration with McKinsey & Company: Risk and Responsibility in a Hyperconnected World, January 2014 [↑](#footnote-ref-30)
31. 30 ITU (2013): Measuring the Information Society [↑](#footnote-ref-31)
32. 31 Consumer Reports Magazine survey June 2011 [↑](#footnote-ref-32)
33. 32 Teen Online & Wireless Safety Survey: Cyberbullying, Sexting and Parental Controls. Cox Communications Teen Online and Wireless Safety Survey in Partnership with the National Center for Missing and Exploited Children, 2009 [↑](#footnote-ref-33)
34. 33 National Cyber Security Alliance (NCSA)-MacAfee Online Safety Study, 2011 [↑](#footnote-ref-34)
35. 34 SMART 2020: Enabling the low carbon economy in the information age [↑](#footnote-ref-35)
36. 35 International Energy Agency: Powering down to save energy need not be a turn-off, January 2013 [↑](#footnote-ref-36)
37. 36 McKinsey Global Institute (2013): Disruptive technologies: Advances that will transform life, business, and the global economy [↑](#footnote-ref-37)
38. 37 Examples include Chile's Digital Agenda 2004, Digital Czech Republic 2011, Estrategia Ecuador Digital 2.0 in 2011, France's Digital Plan 2010, Digital Gabon 2011, Greece's Digital Strategy 2006, Hungary's Digital Renewal Action Plan 2010, Italy's Italia Digitale plan 2010, Mexico's Digital Agenda 2011, Oman's Digital Strategy, United Kingdom 2005, Uruguay Digital Agenda 2008-2010 [↑](#footnote-ref-38)
39. 38 ITU (2012): Trends in telecommunication reform 2012: Smart regulation in a broadband world [↑](#footnote-ref-39)
40. 39 ITU (2013): Regulation and consumer protection in a converging environment [↑](#footnote-ref-40)
41. 40 The World Bank Group (2012): ICT for Greater Development Impact, Sector Strategy [↑](#footnote-ref-41)
42. \* These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-42)
43. 41 Cost of ICT services to be 60 per cent of the 2012 value. [↑](#footnote-ref-43)
44. 42 Cost of ICT services comparing to the 2012 value. [↑](#footnote-ref-44)
45. 43 Due to data limitations, currently mobile-broadband signal coverage is considered in determining this target. [↑](#footnote-ref-45)
46. 44 Exceptionally within the targets framework, this target needs to be discussed in ITU-T Study Group 5. [↑](#footnote-ref-46)
47. 45 Exceptionally within the targets framework, this target needs to be discussed in the relevant ITU study group. [↑](#footnote-ref-47)
48. 46 Target 4.1 is a qualitative target. [↑](#footnote-ref-48)
49. 47 Target 4.2 is a qualitative target. [↑](#footnote-ref-49)
50. 48 Boxes and ticks demonstrate primary and secondary links to goals. [↑](#footnote-ref-50)
51. 49 Refers to the mobile-broadband sub-basket of the ITU ICT Price Basket (IPB). For more information, please refer to ITU (2013): Measuring the Information Society 2013 report, available at: [http://www.itu.int/en/  
    ITU-D/Statistics/Documents/publications/mis2013/MIS2013\_without\_Annex\_4.pdf](http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/MIS2013_without_Annex_4.pdf) [↑](#footnote-ref-51)
52. 50 ITU-D outputs and the implementation framework are further detailed in the Dubai Action Plan, endorsed by the World Telecommunication Development Conference (Dubai, 2014) [↑](#footnote-ref-52)
53. 51 People with specific needs are indigenous peoples, persons with disabilities, including age-related disabilities, youth, women and girls. [↑](#footnote-ref-53)
54. 52 Pending United Nations decision to continue the initiative. [↑](#footnote-ref-54)